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NORTHERN DISTRICT OF CALIFORNIA

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SAN JOSE DIVISION

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CISCO SYSTEMS, INC.,

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Plaintiff,

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v.

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ARISTA NETWORKS, INC.,

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Defendant.

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Case No. 5:14-cv-05344-BLF (NC)

**ARISTA'S OPPOSITION TO CISCO'S
MOTION FOR PARTIAL SUMMARY
JUDGMENT**

Date: August 4, 2016
Time: 9:00 a.m.
Dept: Courtroom 3 - 5th Floor
Judge: Hon. Beth Labson Freeman

Date Filed: December 5, 2014

Trial Date: November 21, 2016

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I.   INTRODUCTION

Cisco's blunderbuss motion asks the Court to decide inherently factual issues that are inappropriate for summary judgment. More a pre-Trial brief than an earnest presentation of issues suitable for judgment, Cisco's 3,000-page submission itself proves the highly factual nature of the questions it raises. The factual record on this motion is intensely disputed, and when all inferences are drawn in Arista's favor no part of the motion may be granted.

Cisco takes a schizophrenic approach to proving its case. It insists that each individual CLI command—short phrases such as "show ip address" and "clear counters"—is an independently protectable expression that Cisco owns and Arista may not use (even while many other switch vendors use hundreds or more of them with Cisco's knowledge and acquiescence). But when put to its proof, Cisco eschews any individualized analysis. By seeking an order that "Cisco owns a valid copyright in Cisco CLI," Cisco would have this Court put its copyright imprimatur on an entire interface that Cisco never independently copyrighted and that it has never defined from 26 different copyrighted works comprising tens of millions of lines of computer code.

What's more, overwhelming evidence proves that Cisco adopted many of the asserted commands and other CLI components from published standards, everyday industry parlance, and interfaces that predated IOS. This Court cannot decide on summary judgment the "mixed question of law and fact"—to use Cisco's counsel's words—to conclude that "the Cisco CLI" is protectable when substantial evidence says it is not. In fact, as to Cisco's claimed "command hierarchies," modes and prompts, Arista is entitled to summary judgment of *no* copyrightable expression. As for infringement—where factual disputes are reserved for the jury—no fact finder can resolve that until the Court decides what is protectable and the degree of protection it deserves.

Similarly, Cisco asks the Court to declare its victory on the highly fact-intensive issue of fair use because its expert said so. But Cisco ignores massive amounts of contrary evidence and law, including (1) the transformative nature of Arista's switches, which Cisco's own employees have hailed as a "new paradigm" of network technology; (2) the purely functional nature of the

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1   asserted CLI elements; (3) the *de minimis* amount of the registered works even alleged to have

2   been copied; and (4) the fact that numerous other network-device vendors have openly touted

3   their use of an "industry standard" or "Cisco-like" CLI for over a decade, without any protest by

4   Cisco. A jury must decide the question of fair use based on a full presentation of the evidence

5   and its assessment of the credibility of Cisco's witnesses and experts.

6   For these reasons and more discussed below, Cisco's motion does not approach satisfying

7   the burden for summary judgment as to any issue in this case, and should be denied in its entirety.

8   **II.   BACKGROUND FACTS**

9   **A.   Cisco's CLI borrowed from prior network operating systems and standard
              industry terminology.**

10   Cisco's operating system arrived courtesy of Kirk Lougheed who, while employed at

11 Stanford University in 1986, modified a network routing operating system that had been

12 developed by a number of Stanford employees and students—and then took the source code with

13 him to Cisco. Ex. 1 at 64–72, 95–98; Ex. 18 at 269, 293–94, 383–84.[1] Similar to other operating

14 systems at the time, such as Digital Equipment Corporation's (DEC's) "TOPS-20" OS that Mr.

15 Lougheed knew from his work at Stanford, the Cisco OS borrowed conventional terminology and

16 command formatting for a rudimentary set of control commands. Black Rpt. ¶¶ 548–82.[2] Thus,

17 for example, Mr. Lougheed used "show" followed by the relevant attribute to call up status

18 information about the router, just as several legacy products did. *Id.* ¶¶ 559–67, 571, 574, 581;

19 *see also* Ex. 18 at 259–60. ██████████████████████████

20 ████████████████████████████ *Id.* ¶¶ 576–78. Many of the CLI elements that

21 Cisco claims to be original in fact owe their origins to TOPS-20 or other well-known pre-existing

22 operating systems such as UNIX, VAX/VMS, and others. *Id.* ¶¶ 548–82; *see also* Ex. 1 at 175.

23 This is unsurprising: Why wouldn't a start-up like Cisco use terminology and conventions that

24 were familiar to computing engineers? Black Rpt. ¶¶ 119, 197, 684; Seifert Rpt. ¶¶ 56–70.[3]

25 After all, the innovation that Cisco brought was network routing functionality; the commands

26

27 [1] Unless otherwise noted, citations to "Ex. ___" are to the Declaration of Ryan Wong.

28 [2] *See* Decl. of John R. Black Jr. ("Black Decl."), Ex. 1 (hereinafter "Black Rpt.").
    [3] *See* Decl. of William M. Seifert ("Seifert Decl."), Ex. 1 (hereinafter "Seifert Rpt.").

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1   used to invoke that functionality were mundane and just a means to an end.

2   Choosing feature commands was an afterthought to actual software development,

3   ▆▆▆▆▆▆▆▆▆▆▆▆▆▆ (Ex. 2 at 76) as compared to the extensive effort to plan, write,

4   and test new features. Starting with Mr. Lougheed, and for hundreds of Cisco engineers after

5   him, the goal in selecting commands was to make thier meaning self-evident. Black Rpt. ¶¶ 583–

6   628 (discussing Cisco testimony and its CLI guidelines). Thus, a primary source of commands

7   was the ever-growing body of published and *de facto* industry standards. *Id.*; *see also id.* at ¶¶

8   67–90. The vast majority of the CLI elements that Cisco asserts come directly from standards

9   documents that have long been treated as public domain, and from terminology that network

10   operators used day in and day out. *Id.* at ¶¶ 583–618; 643–670; Black Decl., Exs. 2, 3, 32.

11   **B.   Cisco waited over 15 years to first register a copyright in its operating system,**
            and never registered a copyright in the "Cisco CLI."

12   Cisco has not asserted a copyright registration for the "Cisco CLI." All of Cisco's asserted

13   copyright registrations are for combinations of a version of the operating system source code

14   and/or object code and associated documentation. *See* Dkt. 64 at Exs. 3–28. Each registration

15   acknowledges that the software includes "third-party and preexisting code" that would not be the

16   subject of that registration. *Id.* But none specifies what parts are new and what parts are old or

17   taken from other sources. *Id.*

18   Although some asserted CLI elements were first used in 1986 Cisco routers, Cisco did not

19   register any operating system with the Copyright Office until Cisco IOS 11.0 in 2002. *Id.*, Ex. 3.

20   Cisco ultimately registered various versions over the years, but often well more than five years

21   after the software was first published or sold. Dkt. 349 at 6. Ultimately, approximately 200

22   asserted CLI commands were first published (in released code or manuals) more than five years

23   before Cisco filed a registration on any corresponding operating system. *Id.*

24   **C.   Cisco joined the industry in promoting convergence around a common CLI**
            command language, which was based on Cisco's commands due to its
            dominance in the networking market.

25   As Cisco became the dominant network equipment vendor and penetrated virtually every

26   network it was essential for any network engineer to be fluent in Cisco's command language. To

27   learn Cisco's operating systems (and hence its CLI), many companies and individuals invested

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1 heavily in training at their own expense. Ex. 3 at 1:19–23. From at least the late 1990s on,

2 virtually every network vendor leveraged this embedded customer knowledge of Cisco

3 commands by building software that responded to similar commands. ████████████████

4 ████████████████████████████ Ex. 4 at 154–58. Many leading network

5 vendors use hundreds of the 500 commands that Cisco cherry-picked to assert against Arista.

6 Broadening the comparison beyond the 500 commands shows, for example, that Dell, one of

7 Cisco's main competitors, uses *more than 1000* identical commands to Cisco, compared with the

8 508 allegedly copied by Arista. Black Rpt. ¶¶ 178–440; Black Decl., Exs. 5–35.

9   This vast overlap in CLI commands was no secret. Dell published videos highlighting

10 how similar its CLI was to Cisco's. *See* Ex. 5 at 96–100 & Depo. Ex. 956 (available at

11 https://www.youtube.com/watch?v=Pel1pffyuDk). HP published manuals showcasing the

12 similarities. *See, e.g.*, Ex. 6. These industry leaders, and many others, have openly touted their

13 use of the familiar "industry standard" CLI since long before Arista was founded. Exs. 40, 64.

14 Trade journals too have regularly commented on the wide emulation of Cisco's CLI throughout

15 the industry. Ex. 7.

16   Cisco knew and relished the fact that many vendors used a similar CLI, because it

17 affirmed Cisco market leadership. Black Rpt. ¶¶ 438–39; Ex. 8. Customers had to continue to

18 learn "Cisco" commands, thereby reminding customers of Cisco's presence. Thus, Cisco

19 repeatedly described and promoted its CLI as an "industry standard" or the "de facto standard."

20 Black Rpt. ¶ 124; Ex. 9. Even one of Cisco's patents asserted in this case explained that "[m]any

21 companies now strive to support some variation on IOS CLI in their routing systems." Ex. 3. Far

22 from objecting to industry-wide usage of similar CLI commands, Cisco embraced it.

23   **D.   Arista designed a completely new Ethernet switch with a radically different
24   operating system and openly adopted an "industry standard CLI."**

       Arista was founded in 2004 to break the lethargy that had stifled innovation in the

25 Ethernet switch business. Led by Sun Microsystems' co-founder Andy Bechtolsheim, and by

26 former lead software developer at Granite Systems (one of Cisco's early acquisitions) Ken Duda,

27 Arista set out to develop a switch hardware design and operating system (EOS) to meet the needs

28 of the burgeoning data center. As the Internet grew and computing services of all sorts were

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handled more and more in "the cloud," the need for higher performance switches grew through the 2000s. Arista anticipated this growth, and when it launched its first product in 2008, it met the new demand with a switch that out-performed anything Cisco (or other vendors) could offer. Ex. 10; Black Rpt. ¶¶ 126–68. Arista initially was embraced by high-end users such as financial traders where Arista's groundbreaking switching speed ("low latency") translated directly into profits. But Arista's success soon spread widely, as it won one prestigious award after another and became the go-to switch for some of the world's most important data center companies such as Microsoft, Google, and Facebook. Exs. 12–14. Arista's switch became "the gem powering the cloud." Ex. 12.

Arista's CLI, like any operating system's, is necessarily public, and Arista has always been open about its use of an "industry standard CLI"—the same phrasing Cisco and countless other vendors used. Cisco knew about Arista and its CLI, ███████████████████████████ ███ Ex. 15. Published reviews also noted Arista's standard CLI. For example, a 2010 Network World review of high-speed data switches that hailed Arista's superiority to Cisco ████████ ██████████████████████████████████ noted that most vendors surveyed, including Arista, "speak[] IOS [Cisco's operating system]" to appeal to customers familiar with the Cisco CLI. Exs. 10, 16.

III.   CISCO CANNOT PROVE UNDISPUTED FACTS SUPPORTING COPYRIGHTABILITY.

Cisco's request for a blanket declaration of copyrightability in "the Cisco CLI" is facially improper in that Cisco asserts a variety of selected non-literal elements. An element-by-element approach—as the law requires—reveals that Cisco cannot establish copyrightability as a matter of law for *any* element, and for some, the record allows only for a finding of *no* copyrightability. Specifically, as set forth in Arista's Motion for Partial Summary Judgment, Cisco's claim to copyright in its command hierarchies, modes and prompts fails as a matter of law, and the Court should grant summary judgment in favor of Arista as to those elements. Dkt. 349 at 11–17. In addition, for almost 200 CLI command abstractions, Cisco cannot carry its burden of showing originality and creativity to support a finding of copyrightability. *Id.* at 5–11. As to the

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1   remainder of Cisco's asserted CLI elements, however, substantial questions of fact about their

2   originality and creativity preclude summary judgment.

3   **A.   Copyright law does not protect functional methods or systems.**

4   Copyright does not protect ideas or any "procedure, process, system, [or] method of

5   operation." 17 U.S.C. § 102(a) ("original work of authorship"); 17 U.S.C. § 102(b); *Baker v.*

6   *Selden*, 101 U.S. 99 (1879). "[M]any aspects" of computer programs that are dictated by

7   functional needs and industry expectations are not entitled to copyright protection. *Sega Enters.*

8   *Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1524-25 (9th Cir. 1992). Thus, in some cases, "even the

9   exact set of commands used . . . is deemed functional rather than creative for purposes of

10   copyright." *Id.*; *see also Bikram's Yoga Coll. of India v. Evolation Yoga, LLC*, 803 F.3d 1032,

11   1039-40 (9th Cir. 2015) (citing *Sega*, 977 F.2d at 1526); *Feist Publ'ns, Inc. v. Rural Tel. Serv.*

12   *Co.*, 499 U.S. 340, 350 (1991) (rule "severely limits the scope of protection"). Copyright does

13   not protect a system that "*primarily* reflects function, not expression," even if "multiple different

14   methods" might achieve the same end. *Bikram*, 803 F.3d at 1040–42.

15   To "defin[e] the scope of plaintiff's copyright," the Ninth Circuit requires a process of

16   "analytic dissection." *Brown Bag Software v. Symantec Corp.*, 960 F.2d 1465, 1475–76 (9th Cir.

17   1992) (citing *Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 209 (9th Cir. 1988)). Determining

18   the scope of copyright protection "depends on whether, on the particular facts of each case, the

19   component in question qualifies as an expression of an idea, or an idea itself." *Johnson Controls,*

20   *Inc. v. Phoenix Control Systems, Inc.*, 886 F.2d 1173, 1175–76 (9th Cir. 1989), *overruled on*

21   *other grounds as stated in Perfect 10, Inc. v. Google Inc.*, 653 F.3d 976 (9th Cir. 2011); *see also*

22   *Apple Computer, Inc. v. Microsoft Corp.,* 35 F.3d 1435, 1443 (9th Cir. 1994); *Durham Indus.,*

23   *Inc. v. Tomy Corp.*, 630 F.2d 905, 913 (2d Cir. 1980) (no protection for mechanical or utilitarian

24   features).

25   Courts have regularly denied copyright protection for sets of computer commands and

26   menu functions. *See Ashton-Tate Corp. v. Ross*, 728 F. Supp. 597, 601–02 (N.D. Cal. 1989);

27   *Ashton-Tate Corp. v. Ross*, 916 F.2d 516, 521–22 (9th Cir. 1990) (list of commands); *Dream*

28   *Games of Arizona, Inc. v. PC Onsite*, 561 F.3d 983, 989 (9th Cir. 2009) (video game menu

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1   options); *see also Allen v. Academic Games League of America, Inc.*, 89 F.3d 614, 617–18 (9th

2   Cir. 1996) ("abstract rules and play ideas" of academic games—however original—could not be

3   copyrighted). In *MiTek Holdings, Inc. v. Arce Eng'g Co., Inc.*, 89 F.3d 1548 (11th Cir. 1996), the

4   Eleventh Circuit held that a computer program's "menu and sub-menu command tree structure"

5   that simply implemented functional steps in a design process was not copyrightable. *Id.* at 1556–

6   57 & n.19. Likewise, in *Mitel, Inc. v. Iqtel, Inc.*, 124 F.3d 1366 (10th Cir. 1997), the Tenth

7   Circuit found no copyrightable expression in a system of "command codes" that—like the CLI

8   commands here—was used to invoke various functions of telephone systems. *Id.* at 1373; *Eng'g*

9   *Dynamics, Inc. v. Structural Software, Inc.*, 26 F.3d 1335, 1347-48 (5th Cir. 1994) (remanding

10   factual questions about originality and industry constraints on input/output formats for highly

11   standardized technical information).

12   While Cisco relies heavily on *Oracle America, Inc. v. Google, Inc.*, 750 F.3d 1339 (Fed.

13   Cir. 2014) (*Oracle I*), that decision does not, and could not, change the controlling Ninth Circuit

14   law. *Id.* at 1353 (regional circuit copyright law applied). In any event, *Oracle* does not control

15   the question of copyrightability here because that case involved the admitted verbatim copying of

16   7000 lines of concededly original declaring code in Java API specifications. *Id.* at 1350–51,

17   1353. In contrast, the CLI components are non-literal abstractions whose originality is hotly

18   contested.

19   **1.   Cisco's command "hierarchies" are unprotectable ideas.**

20   The asserted "copyrighted command hierarchies" amount to nothing more than applying

21   the uncopyrightable idea of a tree structure to group and organize commands by their common

22   first words. *See* Cisco Mot. at 3; Ex. 1 at 157:8–159:19 (command hierarchy is an "abstract

23   concept" and unable to identify principles defining hierarchies); Ex. 17 at 53:9–55:8; Black Rpt.

24   ¶¶ 183–90, 529–35, 581 (re other systems featuring groups of commands sharing keywords); *see*

25   *also* 17 U.S.C. § 102(b); *Apple*, 35 F.3d at 1443; *Signo Trading Int'l Ltd. V. Gordon*, 535 F.

26   Supp. 362, 365–66 (mere "application" of an idea is not copyrightable); Dkt. 349 at 15–16.[4] The

27   ───────────────
     [4] Cisco's command hierarchies also fail as copyright protectable expression because they are
     lawyer creations; there is no single registered work that contains or expresses the asserted
28   hierarchies. They combine CLI command words from several different Cisco operating systems.
     Black Decl., Ex. 38 (hereinafter "Black Rebuttal Rpt.") ¶¶ 19, 48, 99–102.

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1 Court should grant summary judgment in *Arista's* favor that hierarchies are not copyrightable.

2 **2.   Cisco's command modes and prompts are uncopyrightable methods.**

3 The asserted Cisco command modes and prompts are just labels applied to the idea of

4 grouping certain commands and functions. They are not copyrightable because they are titles or

5 names, and they were not original to Cisco. *See* 37 C.F.R. § 202.1(a); *Shaw v. Lindheim*, 919

6 F.2d 1353, 1362 (9th Cir. 1990); *Narell v. Freeman*, 872 F.2d 907 (9th Cir. 1989); *see also* Black

7 Rpt. ¶¶ 498–516, 550–51, 553, 559, 578–80, 636; Black Rebuttal Rpt. ¶¶ 70–71; Ex. 62. The

8 symbols "#" and ">" in command prompts would also be unprotectable, even if they were

9 original. *Torah Soft Ltd. v. Drosnin*, 136 F. Supp. 2d 276, 287–88 (S.D.N.Y. 2001); *Matthew*

10 *Bender & Co. v. W. Pub. Co.*, 158 F.3d 674, 681 (2d Cir. 1998). But those prompts are not

11 original. Ex. 1 at 121:7–15 (">" used by MS-DOS); Ex. 18 at 369:2–20 ("#" used by Stanford),

12 at 386:21–387:7 (">" used by Stanford); Black Rpt. ¶¶ 103, 554, 573, 580–81. Again, the Court

13 should grant summary judgment for Arista—not Cisco.

14 **3.   Cisco's commands and responses are also functional, not expressive.**

15 Arista did not move for summary judgment of no copyrightable expression in the CLI

16 command abstractions themselves because that analysis hinges on disputes of fact as to whether

17 they are a system or method of operation, which is best left for the "analytic dissection" process.

18 Substantial evidence shows they are simply a method of operation. For example, Cisco asserts

19 that "[Arista's] EOS was designed to recognize and process" certain command language that IOS

20 accepts, and that the two operating systems "respond to those commands in similar ways." *See*

21 Dkt. 332-1 (Almeroth Rpt.) ¶ 223. In other words, the CLI command words are essentially digital

22 "knobs" turning on or off, or setting, their respective functionality in the operating system

23 software. Ex. 33 at 57:9–13 ("the command is the knob" for a setting); Ex. 4 at 236:22–24

24 (describing adding "a knob for" functions); *id*. at 184:7–185:3; Ex. 2 at 152:24–153:4 (commands

25 used to "toggle an interface up or down"); Black Rpt. ¶ 523. The fact that the CLI "knobs" have

26 descriptive textual labels or names (*i.e*., the command words that users enter) does not make them

27 expressive: every "knob" must be distinguishable from the others.   *See* Ex. 19 ("The command

28 should describe the capability and function that you are enabling…"). Cisco's conversion of a

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1   control system into digital form does not mean it is any less of a "system." *MiTek*, 89 F.3d at

2   1557. This question for the analytic dissection process is not suitable for summary judgment.

B.   Cisco's CLI commands and responses are not copyrightable because they are not original.

1.   Cisco's commands and responses derive from prior industry practice and technical constraints, not original artistic expression by Cisco.

6   "The *sine qua non* of copyright is originality." *Feist*, 499 U.S. at 305. "Although the

7   amount of creative input . . . required to meet the originality standard is low, it is not negligible."

8   *Satava v. Lowry*, 323 F.3d 805, 810 (9th Cir. 2003). "[A] combination of unprotectable elements

9   is eligible for copyright protection only if those elements are numerous enough and their selection

10   and arrangement original enough that their combination constitutes an original work of

11   authorship." *Id.* at 811. In applying these rules, "[courts] must be careful . . . not to cheat the

12   public domain" by defining copyrightability too broadly. *Id.* at 813.

13   Cisco has made no attempt to prove individually that each asserted command and other

14   non-literal CLI elements is original, much less prove the facts needed for the order Cisco seeks

15   that the "Cisco CLI" (which Cisco has never defined, identified, or registered as copyrighted) is

16   copyrightable. *See* Dkt. at 334 (Cisco's Proposed Order). On this basis alone the motion should

17   be denied.[5]

18   The evidence raises scores of genuine questions about originality. Cisco took common

19   command keywords[6] and a familiar command syntax from pre-Cisco systems ▇▇▇▇▇

20   ▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇▇[7] Black Rebuttal Rpt. ¶¶ 65–69 (pre-Cisco

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[5] As to the evidence Cisco has submitted, there are substantial questions about its credibility that a jury should resolve. For example, Cisco's expert claims to have verified that the Arista EOS CLI accepts all 508 command abstractions that Cisco asserts, but he clearly did not do so; most of the accused 508 command abstractions are not syntactically valid EOS CLI commands, and the log files provided with Cisco's expert report show only 22 CLI commands tested with an Arista device. Black Rebuttal Rpt. ¶¶ 96–98, 141, 173–78; Black Decl., Ex. 65.

[6] Cisco *concedes* that many (if not all) single-word commands like "Copy" and "Delete" are not copyrightable, even though alternative words could conceivably serve the same functions. Dkt. 64 ¶ 7; Ex. 23 at 2; Ex. 37 (Almeroth Rpt.) ¶ 261 (terms "show," "clear," "help," "ip," "no," "arp," and "bgp" all "existed before Cisco").

[7] Cisco suggests that a "creative" aspect of Cisco's CLI was the choice to use a text-based command line instead of a graphical or menu-based interface. *See* Cisco Mot. at 2. Not only is there no copyright protection for the "idea" of using a command line interface, but there were no alternatives in the early 1980s when the Cisco CLI was first created. Ex. 18 at 260:5–9 ("there were no graphical interfaces" and "the only way you could communicate with anything was

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use of hierarchical and structured multi-word commands); *see also* Black Rpt ¶¶ 105–07, 498–

516, 559–67, 545, 547–82, 632–35; Ex. 1 at 123–24 (adopting TOPS conventions), 151:7–23

(multi-word commands in UNIX and TOPS-20 systems Lougheed used before developing Cisco

CLI); Ex. 2 at 32:3–8 ("every operating system" had used 'show' commands); Ex. 4 at 145–446

(Cisco "copied some of the functionality" for its CLI from TOPS-20), 153–54 (look and feel of

Cisco CLI based on TOPS-20 as a model); Ex. 21.

   In addition, "the vast majority of terms used in the accused CLI commands come directly

from industry standards, and well-known descriptive industry parlance." Black Rpt. ¶¶ 583, 584–

618; Black Decl., Exs. 2, 3, 32, 61; Black Rebuttal Rpt. ¶ 75. For example, the asserted

command words "ptp priority 1" (actually a command fragment) is a combination of "ptp," an

industry standard acronym for an industry standard protocol, and "priority 1," an industry

standard parameter defined in the protocol for "ptp." Black Rpt. ¶ 589; Ex. 20 at 137–41, 146–48,

153–56. Likewise, the command "show snmp user" simply combines the unoriginal "show"

command with "snmp user"—a term defined by the SNMP protocol over which Cisco has no

exclusive rights. Black Rpt. ¶¶ 559–82, 598; Ex. 21; Ex. 22 at 146:25–147:11; 162:22–163:19.

Hundreds of other commands are similarly made up entirely of industry standard terms. See

Black Decl., Exs. 2, 3, 32. All of ████████████████████████████████████

██

████████████████████████   *See* Black Rpt. ¶¶ 543–642; Ex. 63. In essence, the Cisco CLI

"authors" of commands were simply naming each command by "what it did," borrowing standard

terminology that someone else had coined. Ex. 2 at 75:12-76:8, ██████ Ex. 24 ████████████

██   Black

Rebuttal Rpt. ¶ 64–73; Black Decl., Exs. 32, 61.

   Cisco's CLI commands were no more creative in later years, when it was constrained to

use the same vocabulary, syntax, and other conventions it had already used. The rule in CLI

design at Cisco was to ██

████████████████   Ex. 4 at 126–28; *see also* Black Rebuttal Rpt. ¶¶ 72–78; Black Rpt ¶¶

through a command-line interface"); *see also* Black Rebuttal Rpt. ¶¶ 79–83.

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1 602–13; ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

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7 Those few command keywords not derived directly from industry standard terminology

8 still fail to qualify as protectable expression. "Words and short phrases such as names, titles and

9 slogans" are not copyrightable. 37 C.F.R. § 202.1(a); *Narell*, 872 F.2d at 907. Even in their full

10 length, the asserted CLI commands are no more than a few words long since Cisco's CLI

11 command guidance was to ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ Ex. 28. Once the Court filters

12 out the public domain vocabulary that any equipment vendor must be free to use, there typically

13 are no more than one or two words remaining, if any. *See* Black Decl., Exs. 32, 61. A smattering

14 of discrete command words that Cisco may have coined, combined with standard, public domain

15 terminology, does not entitle it to copyright protection for any CLI element as a matter of law,

16 much less "the Cisco CLI."[8]

17 The Court should deny Cisco summary judgment of copyrightability and instead consider

18 the extensive evidence of unoriginality during the analytic dissection phase.

19   2. **There is no factual dispute preventing summary judgment in Arista's favor as to roughly 200 late-registered CLI command abstractions.**

20 As discussed in Arista's Motion for Partial Summary Judgment, Dkt. 349 at 5, Cisco's

21 copyright registrations post-dated the first publication of 198 asserted CLI commands by more

22 than five years. *See* Dkt. 329-15. Because Cisco has produced no evidence of originality of those

23 commands, Arista is entitled to summary judgment of non-infringement of each of the 198 late-

24 registered commands.

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[8] Cisco touts the efforts that purportedly went into CLI selection, but effort is no basis for proving copyrightability. *Feist*, 499 U.S. at 349. In any event, there is substantial evidence to the contrary. ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ Black Rpt. ¶¶ 629–30.

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1   In its motion, without providing any specifics, Cisco claims that 20 of its 26 copyright

2 registrations were "filed within five years of the works' initial publication" and that these "cover

3 the vast majority of Cisco CLI at issue." Cisco Mot. at 5:22–24. Cisco appears to rely on

4 registrations of a derivative version of its software to reset the five-year clock for every command

5 in that version, even commands that were first published in a software version released many

6 years earlier. But the Ninth Circuit has squarely "reject[ed] the argument that registration of [a]

7 derivative work creates a presumption of validity of the copyright of the underlying work."

8 *Cooling Sys. & Flexibles, Inc. v. Stuart Radiator, Inc.*, 777 F.2d 485, 490 (9th Cir. 1985),

9 *overruled on other grounds as stated in Jackson v. Axton*, 25 F.3d 884 (9th Cir. 1994). "The

10 copyright in a compilation or derivative work extends only to the material contributed by the

11 author of such work, *as distinguished from the preexisting material employed in the work*." 17

12 U.S.C. § 103(b) (emphasis added).

13   Cisco also argues that this Court should nevertheless exercise its discretion to grant the

14 untimely registrations a presumption of validity. But Cisco cites cases where courts did so

15 because there was no serious dispute that the works were not independently created. *See* Cisco

16 Mot. at 6:5–6. Here, in contrast, significant evidence calls into question Cisco's claims of

17 originality. *See* Part III.B1, *supra*; Dkt. 329-14–329-16. Given the "serious questions" about

18 originality here, the Court should not, in its discretion, stretch the five-year presumption to

19 Cisco's late registrations. *See, e.g.*, *Walker & Zanger, Inc. v. Paragon Indus., Inc.*, 549 F. Supp.

20 2d 1168, 1183 (N.D. Cal. 2007).

21   **3.   At least 397 asserted "commands" are fragments that Cisco's CLI does
        not actually use in the form asserted here.**

22

23   An additional reason for rejecting Cisco's request for a finding of copyrightability as to

the "Cisco CLI" is that at least 397 of the 508 asserted CLI "commands" are not commands at all,
24

but rather only "distillations, shortened forms, (in some cases) prefixes, and not issuable under
25

any configuration of any Cisco product." Black Rebuttal Rpt. ¶¶ 35–40, 95, 176–77; Black Decl.,
26

Ex. 65 at 1. For example, the first asserted command, "aaa accounting," is not a valid CLI input.
27

See Ex. 30 at 98:14–102:2; Black Decl., Ex. 65 at 1. In addition, the words that make up many of
28

the asserted command fragments, once arguments (*i.e.*, parameters) are taken into account, are

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1 ordered differently than Arista's, further calling into question which aspects of command

2 fragments Cisco could claim are protectable. *See, e.g.*, Black Rebuttal Rpt. ¶ 37. Cisco's

3 "commands" are artificial, lawyer-created exhibits. Genuine disputes exist as to whether such

4 discrete word selections deserve protection.

5   **4.   Cisco's untimely "helpdesc" allegations should be stricken—but in any
               event the asserted texts are also uncopyrightable.**

6

7   Cisco asserts copying of over 400 "helpdesc" command descriptions—textual CLI output

8 describing what commands do—even though Cisco failed to allege those descriptions as a basis

9 of its claim until the *last day* of discovery. With remarkable chutzpah, Cisco claims that "Arista

10 has waived any argument as to lack of originality" of these because Arista could not respond to

11 Cisco's untimely theory. In fact, Arista immediately moved to strike the untimely contentions,

12 and the motion will be heard by Judge Cousins on July 27. *See* Dkt. 304-3; Dkt. 363.

13   Regardless, the helpdesc texts are not entitled to any copyright protection because they are

14 mundane and generic phrases describing what commands do, such as "Copy from one file to

15 another," "Delete a file," "Display detailed information," and "time in minutes." *See* Dkt. 332-1

16 (Almeroth Exhibit Copying-6); *See* Black Rebuttal Rpt. ¶¶ 143–45; Black Decl. ¶ 73.

17 **IV.   CISCO HAS NOT SHOWN UNDISPUTED COPYING OF PROTECTABLE
           EXPRESSION.**

18   **A.   Copyright infringement is a question of fact for the jury, and cannot be
                  decided by any fact finder until unprotectable elements are filtered out and

19   the scope of protection is determined.**

20   Cisco's motion seeking a sweeping order that Arista "infringed Cisco's copyright by

21 copying Cisco CLI" (Dkt. 334 (Cisco's Proposed Order)) is an invitation to commit clear error,

22 ignoring critical disputed facts and the Ninth Circuit's required process for resolving them.[9] *See,*

23 *e.g.*, *Data E. USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 209 (9th Cir. 1988) (holding finding of

24 substantial similarity based on unprotectable expression was clear error); *see also Harper House,*

25 *Inc. v. Thomas Nelson, Inc.*, 889 F.2d 197, 207 (9th Cir. 1989) (reversing verdict for failure to

26 "adequately explain to the jury which material was, in fact, protectable").

27 _____

    [9] Cisco's motion *does not cite a single case* granting summary judgment of "copying." The only
28 summary judgment case Cisco cites granted summary judgment to the *defendant* after engaging in
    analytic dissection. *Benay v. Warner Bros. Entm't*, 607 F.3d 620, 625 (9th Cir. 2010).

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1   The Ninth Circuit requires "analytic dissection" before comparing works and assessing

2   infringement "[b]ecause only those elements of a work that are protectable . . . can be compared

3   when it comes to the ultimate question of illicit copying." *Apple*, 35 F.3d at 1443–43. Cisco has

4   conceded that analytic dissection involves mixed questions of law and fact for the Court,

5   rendering it particularly unsuitable to summary judgment in favor of Cisco. *See* Dkt. 321 at 32:8–

6   15; *see also Harper House*, 889 F.2d at 201.

7   After the plaintiff identifies alleged similarities between the works, the Court must dissect

8   the work to "determine whether any of the allegedly similar features are protected by copyright."

9   *Apple*, 35 F.3d at 1443. After "dissect[ing] the alleged similarities and consider[ing] the range of

10   possible expression," the court "*must* define the scope of the plaintiff's copyright." *Id.* Where

11   the range of possible expression is narrow (as in this case), copyright protection is "thin" and

12   infringement requires "virtual identity" between the disputed works as a whole. *Apple*, 35 F.3d at

13   1442–43; *see also Mattel, Inc. v. MGA Entm't, Inc.*, 616 F.3d 904 (9th Cir. 2010); 4-13 Nimmer

14   on Copyright § 13.03.

15   Analytic dissection is particularly essential here. First, Cisco has claimed both (1) that

16   each CLI command, mode, prompt, response, and hierarchy is an independently protectable

17   expression, and (2) that Arista infringed an undefined, monolithic "Cisco CLI." *Compare* Dkt. 82

18   at 21:14–17 ("And I want to be perfectly clear with the Court . . . that Cisco does believe it's

19   entitled to copyright protection on each of these multi-word commands.") *with* Dkt. 334 (Cisco's

20   Proposed Order). Second, with only a few exceptions, Cisco asserts that Arista copied non-literal

21   elements of computer code—abstract elements that do not appear in source code directly. *See*

22   Dkt. 312 at 1:10–18, 2:7–3:1. Assessing whether such elements were copied is a complex

23   process that must await analytic dissection. *See* 4 Nimmer on Copyright § 13.03 (assessing

24   similarities of computer programs "often exceedingly difficult" for lay judges and juries,

25   especially "when the allegations of infringement go beyond mere literal copying of the program

26   code"). Indeed, this Court recognized at the June case management conference that it is still

27   unclear "what Cisco is presenting as protectable." Dkt. 321 (6/16/16 CMC Hrg. Tr.) at 37:9–20.

28   Cisco tries to short-circuit analytic dissection based on what it calls "direct evidence" of

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ARISTA'S OPPOSITION TO CISCO'S MOTION FOR PARTIAL SUMMARY JUDGMENT
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1   copying. But no authority limits the need for analytic dissection to circumstantial copying cases,

2   nor would such a rule make sense because "others may freely copy a work's ideas (and other

3   unprotectable elements)." *See, e.g.*, *Mattel*, 616 F.3d at 913-14. Thus, even direct evidence of

4   "copying" of unprotectable elements is legally irrelevant. Because Cisco has not even attempted

5   to comply with the analytic dissection requirement, the Court should deny this part of Cisco's

6   motion.

7   **B.   Material disputes of fact bar summary judgment for Cisco as to copying of
                        any protected expression.**
8
            Cisco's "infringement" argument also fails for other reasons.
9
            First, Cisco ignores the Ninth Circuit rule that infringement requires a comparison of the
10
    registered work to the accused work as a whole (after unprotectable elements are filtered out), to
11
    determine whether a reasonable observer "would consider the copyrighted and challenged *works*
12
    substantially similar (or virtually identical)." *Mattel*, 616 F.3d at 914 & n.9 (emphasis added);
13
    VMG Salsoul, LLC v. Ciccone, __ F.3d __, 2016 WL 3090780, *3 (9th Cir. June 2, 2016)
14
    (plaintiff must show more than *de minimis* copying). Cisco's "comparison" is between lawyer-
15
    created exhibits of cherry-picked words. But the registered works are many orders of magnitude
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    larger, comprising tens of millions of lines of code—enough to fill hundreds of thousands of
17
    pages of printed text. And Cisco does not even address the other aspects of its works or the
18
    fundamental differences between Cisco's and Arista's operating systems. *See infra* Part V.D
19
    (accused elements are *de minimis* portions of Cisco IOS, which contains more than 450,000
20
    distinct commands, 70 modes, and 79,000 command responses); Black Rpt. ¶¶ 687–96; Black
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    Decl. ¶ 71. Likewise, Cisco compares minimal snippets of thirty-seven command responses,
22
    ignoring the differences among those thirty-seven responses, not to mention the countless other
23
    Cisco screen displays that are not even accused of being similar. *See* Dkt. 332-1 (Almeroth
24
    Exhibit Copying-3). Finally, the accused portions of manuals are small excerpts of otherwise
25
    dissimilar manuals, which Cisco has made no attempt to show were essential to or a significant
26
    proportion of its overall documentation. And many of the accused excerpts are too dissimilar to
27
    support any finding of infringing similarity.[10] *See* Dkt. 332-1 (Almeroth Exhibit Copying-1).
28
    _____
    [10] Although Arista has conceded that an Arista employee copied certain portions of Cisco's

                                                    15

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1   *Second*, Cisco ignores the undisputed fact that Arista incorporated CLI elements into EOS

2 from NextHop, another software vendor whose product Arista purchased. Ex. 30 at 117:11–

3 118:22, 144:4–150:15. NextHop code used at least 123 of the same command fragments asserted

4 by Cisco here, as well as all four modes and prompts. Black Rpt. ¶¶ 396–404; Black Decl., Ex.

5 24. Arista's independent sourcing of many CLI command elements is reason alone to deny this

6 part of Cisco's motion.

7   *Third*, Cisco has ignored that many accused Arista commands take arguments or

8 parameters in a different order than Cisco's, resulting in a different word sequence and command.

9 And Cisco ignores that for at least 397 asserted command fragments, the *functional* Cisco

10 command (as opposed to the lawyer creation) is in fact different than Arista's. *See* Part III.B.3,

11 *supra*; *see, e.g.*, Black Rebuttal Rpt. ¶ 37. Thus, even substantial similarity of protected

12 expression is in dispute, let alone "virtual identity."

13   *Finally*, Cisco's evidence of similarity between Cisco's and Arista's CLI elements is a

14 half-hearted effort that does not carry its burden as plaintiff. Excluding inadmissible attorney-

15 generated lists of words, *the entirety* of Cisco's evidence of similarity is Exhibit 7 to Dr.

16 Almeroth's report (and Almeroth's disputed opinions), which is "logs" purporting to show that

17 just a small fraction of the 500 accused command abstractions and other accused CLI elements

18 are supported in some form in Arista's software. [11] *See* Dkt. 332-1 (Almeroth Exhibit Copying-

19 7); Black Rebuttal Rpt. ¶¶ 173–78.

20

21

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22 product documentation, unauthorized, that does not make his copying actionable. Analytic dissection and assessments of substantiality are still essential.

23 [11] Cisco's evidence of similarity (or identicality) of other elements is also incomplete, at best. Cisco's so-called "hierarchies" are artificial constructs for this litigation that strategically omit

24 differences for no principled reason (*see* Part III.A.1 *supra*; Black Rebuttal Rpt. ¶¶ 99–102). Cisco also fails to provide a principled comparison of modes and prompts. Black Rebuttal Rpt.

25 ¶¶ 96–98. Arista has a far more complex system of modes, and the actual prompts displayed when using an Arista switch are not what Cisco asserts. *Id.* And there is no evidence that Arista

26 copied "hierarchies" or "modes" from Cisco as opposed to from countless other systems, even ones pre-dating Cisco, that used similar methods of organization. And while Cisco's belated

27 "helpdesc" theories should be stricken, Cisco also fails to show why summary judgment of similarity is appropriate. *See, e.g.*, Dkt. 332-1 (Almeroth Exhibit-Copying 6) at 4 (asserting that

28 Arista's description "Enter the size of the buffer" infringes Cisco's "Maximum size of the received buffer").

16

ARISTA'S OPPOSITION TO CISCO'S MOTION FOR PARTIAL SUMMARY JUDGMENT
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1

V.   CISCO IS NOT ENTITLED TO SUMMARY JUDGMENT ON FAIR USE

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The fair use defense is "is a mixed question of law and fact" that "requires a case-by-case determination whether a particular use is fair." *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 549, 560 (1985). Four "nonexclusive factors" are considered: (1) "the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;" (2) "the nature of the copyrighted work;" (3) "the amount and substantiality of the portion used in relation to the copyrighted work as a whole;" and (4) "the effect of the use upon the potential market for or value of the copyrighted work." *Id.* at 588; 17 U.S.C. § 107. No single factor is dispositive; all factors must be carefully weighed. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577–78 (1994). The jury can also consider other indicia. For example, "fair use is appropriate where a 'reasonable copyright owner' would have consented to the use, i.e., where the 'custom or public policy' at the time would have defined the use as reasonable." *Wall Data Inc. v. Los Angeles Cnty. Sheriff's Dept.*, 447 F.3d 769, 778 (9th Cir. 2006)). The fair use analysis can be taken away from the jury only "[w]here there are no material facts at issue and the parties dispute only the ultimate conclusions to be drawn from those facts." *Oracle I*, 750 F.3d at 1373 (remanding for trial on fair use). Here, there is extensive disputed evidence.

18
19

A.   Cisco's fair use argument hinges on the unresolved mixed factual/legal question of what if any portion of Cisco's works merit copyright protection.

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24

To evaluate fair use at all, the fact finder must understand the extent of copying of protectable expression. Cisco's blanket request for summary judgment of "no fair use" assumes that ***all*** of the allegedly copied material is protected expression—but the evidence proves the opposite. The Court should deny Cisco's motion as to fair use on that basis alone because the gating question of whether, and to what extent, there has been any copying of protectable expression—and if so, what protectable expression has been used—remains hotly contested.

25
26

B.   Arista has offered ample evidence that Arista's alleged use of the asserted works is transformative.

27
28

The first fair-use factor focuses on "the purpose and character of the use" and requires weighing "whether and to what extent the new work is transformative" and "serves a commercial

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1   purpose." *Oracle I*, 750 F.3d at 1374 (citations omitted). Commercial use does **not** preclude fair

2   use. *Hustler Magazine Inc. v. Moral Majority Inc.*, 796 F.2d 1148, 1152 (9th Cir. 1986). To the

3   contrary, in *Oracle v. Google,* the Federal Circuit remanded fair use to the jury despite largely

4   crediting Oracle's assertion that "Google knowingly . . . copied a creative work to further its own

5   commercial purposes, did so verbatim, and did so to the detriment of Oracle's market position."

6   *Oracle*, 750 F.3d at 1376. On remand, the jury **found fair use** despite evidence that Google's

7   infringement generated over $40 billion in revenue. *See Oracle America, Inc. v. Google, Inc.*,

8   No. 10-cv-03561-WHA, 2016 WL 3181206, at *8, n.7 (N.D. Cal. June 8, 2016) (herein *Oracle II*)

9   (denying Oracle's Rule 50 motion following a fair use verdict). Even assuming Arista's use of

10   the disputed works was commercial and generated millions of dollars in revenue, a reasonable

11   jury could easily find fair use by Arista. *Id.*

12   The parties' disagreement over transformative use also bars summary judgment on fair

13   use. *Campbell*, 510 U.S. at 579 ("[T]he more transformative the new work, the less will be the

14   significance of other factors, like commercialism[.]"). Dr. Black and Arista's own engineers will

15   show the jury that Arista's use of the accused CLI features was highly transformative because it

16   added "something new [to the asserted works], with a further purpose or different character,

17   altering [them] with new expression, meaning or message." *Id.* Arista's EOS is "fundamentally

18   different" from Cisco IOS in both architecture and operation. Black Rpt. ¶¶ 128–68. Written in a

19   different language than Cisco's operating systems, EOS's innovations include: a largely

20   unaltered Linux kernel, a publish/subscribe model of controlling the state of different operating

21   system agents, a modular agent architecture, and its open programmability and extensibility. *Id.*

22   Arista has also pioneered specific feature functionality such as LANZ (Latency Analyzer), ZTP

23   (Zero Touch Provisioning), VM Tracer, and eAPI. *Id.*[12]

24   Arista's EOS is designed for very different hardware from Cisco's works. Arista's

25   switches far outstrip Cisco's for port density, low power consumption, and low latency, forcing

26   Cisco to attempt to innovate to catch up. Black Rpt. ¶¶ 673–80. These innovations (not the

27

28   [12] Because of these differences, some CLI command elements perform **totally different** functions
     in Arista's EOS than in Cisco IOS, or similar functions in different ways. Black Rpt. ¶¶ 163–67.

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1 standard CLI) are why customers choose Arista over the competition. *See, e.g.*, Decl. of Cate

2 Elsten ("Elsten Decl."), Ex. 1 at 23–24. Even veteran Cisco engineers describe Arista EOS as

3 "based on a new paradigm." Ex. 29 at 109–15.

4   For at least these reasons, the Court "cannot say that there are no material facts in dispute

5 on the question of whether [Arista's] use is 'transformative.'" *Oracle I*, 750 F.3d at 1376.

C.   Overwhelming evidence demonstrates that the allegedly copied aspects of the asserted copyrighted works are primarily functional.

7   The second fair-use factor "turns on whether the work is informational or creative."

8 *Oracle I*, 750 F.3d at 1375 (citations omitted); *Harper & Row*, 471 U.S. at 563 ("The law

9 generally recognizes a greater need to disseminate factual works than works of fiction or

10 fantasy."). "[I]f a work is largely functional, it receives only weak protection." *Sega Enters., Ltd.*

11 *v. Accolade, Inc.*, 977 F.2d 1510, 1527 (9th Cir. 1992) (citation omitted). This factor can support

12 fair use "[w]here purely functional elements exist in the work and it is necessary to copy the

13 expressive elements in order to perform those functions." *Oracle I*, 750 F.3d at 1375 (citing

14 *Sega*, 977 F.2d at 1526). *see also Oracle II*, 2016 WL 3181206, at *11 (upholding fair use verdict

15 because the "jury could reasonably have given weight to the fact that cross-system confusion

16 would have resulted" had Google not used the accused work, and that "a common set of

17 command-type statements," like "a common QWERTY keyboard," advances the "useful arts".).

18   Here, the asserted CLI elements of Cisco's works are entirely functional and designed for

19 the purpose of avoiding confusion and interoperability. Cisco and its expert argue that the Cisco

20 CLI is creative because random words "such as 'steve' or 'book' or 'phone' ***could*** be used just as

21 well" in a CLI command as descriptive and technical terms. *See* Dkt. 332-1 (Almeroth Rpt.) ¶

22 111 (emphasis added).

23   But in practice, Cisco's works ***do not*** actually use absurd or fanciful names for its

24 commands. Instead, Cisco uses a vocabulary already adopted by the industry, and Cisco's own

25 manuals guide engineers to use well-known technical terminology. *See* Ex. 17 at 29, 38–40, 45,

26 64–66, 69–72 (discussing the Manifesto and constraints on Cisco IOS CLI command creation);

27 Exs. 31–32; Black Rpt. ¶¶ 602–13. Networking devices play a critical role in securely and

28 reliably delivering data, and therefore Cisco (and other vendors) would risk network failure by

19

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1 using arbitrary, fanciful terminology. Black Rpt. ¶¶ 643–67 (explaining the various functional

2 constraints and user expectations for the asserted CLI elements); Black Rebuttal Rpt. ¶¶ 57–63

3 (explaining the core functional purposes underlying the asserted CLI elements). Former Cisco

4 engineer Anthony Li said it best ███████████████████████████████████

5 ██

6 ████████████████████████████ Ex. 4 at 129–30.[13] Arista was guided by the same

7 principles. *See, e.g.*, Exs. 30 at 211–12 (Arista used CLI commands "that are common in our

8 industry and well-understood by our customers"), 34 at 39 (Arista supported an "industry

9 standard CLI" with features "widely known and implemented by several vendors using well-

10 known commands").

11   Cisco's own documents and employees therefore confirm what Arista will demonstrate to

12 the jury: the asserted works are factual and functional in nature, which strongly supports fair use.

13 *Hustler*, 796 F.2d at 1153–54; *Oracle II,* 2016 WL 3181206, at *10.

14   **D.**   **The allegedly copied portions of Cisco's works are miniscule in relation to the copyrighted work as a whole.**

15

16   The third fair-use factor examines "the amount and substantiality of the portion used in

17 relation to the copyrighted work as a whole." 17 U.S.C. § 107(3). "If the secondary user only

18 copies as much as is necessary for his or her intended use, then this factor will not weigh against

19 him or her." *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 820–21 (9th Cir. 2002).

20   The scope of Cisco's asserted works is far more expansive than the accused CLI features.

21 The Cisco IOS software itself comprises tens of millions of lines of source code. *See* Black Rpt.

22 ¶ 690. And by Cisco's own count, IOS contains at least 16,000 documented CLI commands

23 (although a more "apples to apples" count compared with the allegation that Arista copied 508

24 commands is over 450,000 distinct Cisco IOS CLI commands). *See id*. ¶ 692. The total number

25 of supported command modes and prompts, and command responses, in Cisco IOS also far

26 outnumber the four accused command modes and prompts, and the thirty-six command responses

27 [13] ██

28 ████████████████████████████ *Id.* at 63–64, 167.

        20

1   in this litigation. *See* Ex. 35 (Cisco user manual showing over 70 non-asserted modes and

2   prompts in Cisco IOS); Black Decl. ¶ 71 (there are over 79,000 command responses in Cisco

3   IOS).

4   In fact, the 508 asserted CLI command abstractions comprise less than four percent (based

5   on Cisco's conservative count of 16,000 IOS commands) of the CLI commands supported by

6   Cisco IOS, and there is no credible evidence whatsoever that any Cisco source code was copied

7   by Arista. *See* Black Rpt. ¶ 132 (████████████████, while EOS is written in

8   Python, C++, and TACC); 690–95 (discussing the allegedly copied CLI elements as compared to

9   the entirety of Cisco's asserted works); Black Rebuttal Rpt. ¶¶ 142–66 (same); Ex. 36 at 93–94

10   ("I will absolutely say [Arista] did not copy source code."). Moreover, the *de minimis* overlap of

11   disputed CLI commands compared to the total CLI commands in the asserted works is far below

12   the ████████████████████████

13   ████████████████████████. *See* Black

14   Rpt. ¶ 696.

15   Finally, the widespread, unlicensed use of the same CLI "expressions" that Cisco accuses

16   in this lawsuit strongly undercuts Cisco's assertion that the CLI is the "heart and soul" of Cisco

17   IOS. The networking industry has used the vast majority of asserted CLI elements for a decade

18   or more without objection by Cisco—including all of the accused command modes and prompts,

19   and over 450 of the accused CLI command abstractions—and they are part of an accepted *de*

20   *facto* industry standard CLI. *See* Black Rpt. ¶¶ 67–90 (*de facto* industry standards), 91–119

21   (common pre-Cisco features of CLIs), 169–437 (analyzing over *twenty* vendors, including

22   Cisco's major competitors, who have openly used hundreds of the asserted CLI elements since

23   the 1990s). Because Arista only used what was reasonable and necessary to support and maintain

24   interoperability with the same *de facto* industry standard CLI that Cisco's competitors have

25   openly supported for decades, this factor weighs strongly in favor of fair use.

26   **E.   Arista's use of the asserted portions of the copyrighted works has had little**
             effect on the potential market.

27

28   The fourth fair-use factor looks at "the effect of the use upon the potential market for or

     value of the copyrighted work." *Harper & Row*, 471 U.S. at 566. This includes the infringer's

                                            21

1   own impact, as well as the potential impact of "unrestricted and widespread conduct" of the same

2   kind. *Campbell*, 510 U.S. at 590 (citations omitted).

3   Here, the fact that the asserted CLI elements are part of a widely supported *de facto*

4   industry standard CLI substantially undercuts any argument that Arista's use of the accused CLI

5   features has impacted the market for Cisco IOS. Indeed, when this lawsuit was filed, Cisco stated

6   that "HP, Brocade, Alcatel-Lucent, Juniper Networks and Extreme" were examples of

7   "formidable competitors [who] have innovated on their own." *See* Ex. 23. Those five

8   competitors, however, support the same four industry-standard command modes and four

9   command prompts accused here, *see* Black Decl., Ex. 4, and collectively use over 350 of the

10   accused CLI command abstractions, *see id*, Exs. 8, 41.

11   ██

12   ██

13   ██

14   ██

15   ██

16   ██

17   ██

18   ██

19   ██

20   ███████████████

21   ██

22   • ██

23   ██

24   ████████████████████████ *See* Ex. 5 at 37–41, 46–63, 105. Dell supports the same four
     accused command modes and prompts at issue here, over 250 of the disputed CLI

25   command abstractions, and *well over 1000 different CLI commands that overlap with*
     Cisco IOS, and it has been openly using an industry-standard CLI since at least 2003.

26   *See* Elsten Decl., Ex. 1 at 6 (confirming competitors to Cisco); Black Rpt. ¶¶ 256–300,
     436.

27

28   • ██

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[REDACTED]

Id.

- Brocade openly markets their products as supporting "an industry-standard hierarchical shell familiar to … networking administrators." *See* Ex. 42 at 15. Brocade supports the same four accused modes and prompts that Cisco accuses in this lawsuit, and over 240 of the disputed CLI command abstractions. Black Rpt. ¶¶ 243–55.

The overwhelming evidence of broad overlapping usage of the identical words and concepts Cisco now claims copyright in (*see generally* Black Decl., Ex. 41) (Rebuttal Amended Appx. G) substantially undermines any argument by Cisco that Arista's use of standard CLI features caused market harm to Cisco. Seifert Decl., Ex. 1 ¶¶ 86–113; *see Oracle II*, 2016 WL 3181206, at *10 (the availability of "free and open source" java in the market supported a finding of minimal market harm for fair use). Plainly customers look to non-CLI factors and features when making purchasing decisions. Elsten Decl., Ex. 1 at 20–28 (customers care about latency, programmability, port density, reliability, responsiveness, and customer support); *id.*, Ex. 2 at 74–92.

F.   A reasonable copyright holder of the asserted works would consider Arista's use to be fair use, as proven by Cisco's own conduct for many years.

The above evidence also shows that a reasonable copyright holder of the asserted works would consider Arista's use of the asserted portions to be fair use. *See Wall Data*, 447 F.3d at 778. Cisco has known since the late 1990s that its competitors used Cisco-like CLIs and "had commands similar to Cisco's." *See, e.g.*, Ex. 33 at 150. By the early 2000s, Cisco knew that Procket Networks, Dell, Juniper, and Adtran supported what by then had become a *de facto* industry standard CLI. *See, e.g.*, Ex. 4 at 158–163, 228; Ex. 61.[14] And Cisco's own documents show that they [REDACTED]

Cisco even referred to its own CLI, in its own documents, as an "industry standard" CLI.[16] A

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[14] Cisco's own documents [REDACTED]

[15] Cisco was aware of Arista's switches, [REDACTED], but did not object to Arista's use of CLI commands for six years. *See* Ex. 48 at 101–02, 104–07; Exs. 49–50; Ex. 51 at 30–31; Ex. 52 at 100:18–107:25.

[16] *See e.g.*, Exs. 7; 8 [REDACTED]

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1   jury could easily find from this evidence that a reasonable copyright holder of the asserted works

2   would consider Arista's selective use of the asserted CLI modes, prompts, hierarchies,

3   commands, and command responses to be reasonable given the widespread adoption of those

4   features across the networking industry. *Wall Data*, 447 F.3d at 778.

5   In sum, the many factual disputes about fair use mean this defense must go to the jury.

6   **VI.   CONCLUSION**

7   For the above reasons, Cisco's summary judgment motion should be denied in its entirety.

8

9   Respectfully submitted,

    Dated: July 14, 2016   KEKER & VAN NEST LLP
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                                    ARISTA NETWORKS, INC.
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